Xylosma longipedicellata (Flacourtiaceae), a New Species from Nicaragua

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ABSTRACT. *Xylosma longipedicellata*, a new species from the dry upland forests of Nicaragua and neighboring Honduras, is described, and its relationships to other similar Central American species are discussed.

In the course of preparing a treatment of Flacourtiaceae for the Flora de Nicaragua, a new species of *Xylosma* was encountered and is here named and described.

Xylosma longipedicellata A. Pool, sp. nov. TYPE: Nicaragua. Departamento de Estelí: El Chayote; 13°16′N, 86°19′W, elevation 1100–1200 m, 31 July 1983 (fruit), *Pedro P. Moreno 21765* (holotype, MO; isotype, HNMN not seen).

Arbor parva vel frutex, deciduus exarmatus. Folii petiolis 9–18 mm longis. Flores ut videtur hermaphroditi staminibus ca. 15 vel feminei staminodiis 3–4 praediti. Fructus subglobosus pedicello usque ad 12–15 mm elongato supra basin 3—7 mm articulato insidens.

Small tree or shrub, 1-12 m, deciduous, without thorns, young stems minutely puberulent, soon glabrescent. Leaves obovate, oblanceolate or wide-elliptic, apex acute, obtuse or approaching rounded, then abruptly and briefly acuminate, base decurrent on petiole, 4.5-10.7 cm long, 2.5-5 cm wide, margin serrate-glandular, teeth often incurved with glands on lower surface, margins often slightly revolute over glands; petiole 9-18 mm long, glabrous. Flowers seemingly perfect or pistillate with staminodes, inflorescence appearing sessile and fasciculate in flower (noticeably pedunculate and subcorymbose in fruit), flowering from leafless axils (all leaves lost or some younger leaves present), 1 inflorescence per axil, 1-6 flowers per inflorescence, peduncle in fruit 2-6 mm long, densely puberulent, often totally obscured by bracts; bracts 1-2 mm long, imbricate at base of inflorescence and often present at point of articulation on pedicel, puberulent, villose-ciliate; pedicel 2.5-7 mm, expanding in fruit to 12-15 mm long, articulate at 1-3 mm from base (3-7 mm in fruit), densely puberulent; sepals yellow, 5 or

6, ovate, 1.2–2.3 mm long, 0.7–2 mm wide, internally densely hispid, externally puberulent (sometimes with apex villous), margin ciliate; stamens 13–15 in perfect flowers, 2–2.5 mm long, staminodes or bases of antherless filaments 3–4 in pistillate flowers; disk lobes fused to various degrees to form an irregularly lobed annulus 0.2–0.3 mm high, succulent; ovary glabrous, style 2–3-branched, branches divergent or not, 0.7 mm long, glabrous, stigmas many lobed. Fruit green or red, subglobose, 4–8 mm diam., glabrous, retaining style, stigmas, and disk, usually retaining some filaments, rarely retaining sepals; seeds 2–4, wedge-shaped or ovoidal, 4–4.5 mm long, 2–3.2 mm wide, glabrous.

Distribution. Xylosma longipedicellata has been collected in northwestern Nicaragua, in the departments of Estelí, Jinotega, and Madriz, and in south-central Honduras in the department of Francisco Morazán. This is an area that receives very limited precipitation: only 712 mm of annual rainfall is recorded at the weather station in Condega, with an average humidity of 69% (Fenzl, 1989). The collections are all from relatively high elevations, between 1000 and 1600 m. The substrate is the Tertiary volcanic, "Grupo Coyal, Superior" (Fenzl, 1989).

Phenology. Plants have been collected in flower and without leaves (or with only very young leaves) in January, February, and March; two were collected in flower with more mature leaves (but almost all from younger branchlets)—one in November and the other in January. This corresponds fairly well with the dry season, which runs from November to April (Fenzl, 1989). Plants have been collected in fruit with leaves in December, February, March, April, May, June, and July.

Paratypes. NICARAGUA. Depto. Estelí: Salto la Estanzuela, 13°01'N, 86°21'W, elevation 1000 m, 29 Mar. 1983 (perfect flowers), P. P. Moreno 21138 (HNMN, MO); Salto la Estanzuela, 13°01'30"N, 86°21'W, elevation ca. 1100 m, 26 Nov. 1983 (perfect flowers), A. Grijalva & M. V. Sandino 3300 (HNMN, MO); El Delirio, entrada al Zacatón, camino a Miraflor, 13°13'N, 86°14'W, elevation aprox. 1400 m, 26 Dec. 1982 (young fruits), P. P. Moreno 19390 (HNMN, MO);

El Chayote, Fila la Mesa, 13°16'N, 86°19'W, elevation 1100-1250 m, 26 Dec. 1982 (pistillate flowers, young fruits), P. P. Moreno 19973 (HNMN, MO); Cerro Quiabú, 13°07'N, 86°26'W, elevation ca. 1604 m, bosque enano, 14 Jan. 1981 (pistillate flowers), P. P. Moreno 6044 (MO); Mesas Plan Helado, 21.5 km al E de Estelí, por el camino de Paso de León-Miraflor, 13°14'N, 86°15′W, elevation 1360–1380 m, 21 Feb. 1982, (fruits), P. P. Moreno 15406 (HNMN, MO); Plan Helado, camino al la Laguna de Miraflor, yendo por Paso de León, 13°12'N, 86°14'W, elevation 1360-1380 m, 22 Apr. 1982 (fruits), P. P. Moreno 16197 (HNMN, MO). Depto. Madriz: between La Sabana and Cusmapa, elevation 1350 m, 14 Mar. 1967 (fruits), A. Molina R. 20599 (MO). Depto. Jinotega: Ocotillo near Sta. Lastenia, alt. 1550 m, 17 Jan. 1965 (flowers), L. O. Williams et al. 27841 (F). HONDURAS. Depto. Francisco Morazán: vicinity of Suyapa-Tegucigalpa, 10 km on road to La Montañita, alt. 1000 m, 16 May 1976 (fruits), A. Molina R. & A. R. Molina 31478 (MO); Los Artillos, alt. 1100 m, 19 June 1948 (fruits), L. O. Williams & A. Molina R. 14332 (MO).

Relationships to similar species from Central America. Sleumer (1980) treated all Xylosma from Central America with seemingly perfect flowers and numerous stamens as one very variable species, Xylosma intermedia (Seemann) Triana & Planchon, and used this sexual condition to separate Xylosma intermedia in the lead couplet of his key to the Central American species. It is now possible to recognize three distinct species that (at least in some individuals) have perfect flowers with numerous stamens. An artificial key is therefore provided.

ARTIFICIAL KEY TO SPECIES OF XYLOSMA FROM CENTRAL AMERICA WITH PERFECT FLOWERS

1a. Petioles 9-18 mm long, leaf base decurrent; ped-

- 1b. Petioles 4–10 mm long, leaf base acute, obtuse or rounded; pedicels articulate at base, 1–6 mm long in fruit; stamens 20–50.

The pistillate flowers of *Xylosma longipedicellata* that possess a few staminodes would, following Sleumer (1980), be identified as *Xylosma flexuosa* (Kunth) Hemsley, and two specimens of *Xylosma longipedicellata* (L. O. Williams & A. Molina R. 14332 and A. Molina R. 20599) were cited as X. flexuosa by Sleumer. Xylosma longipedicellata can be separated from X. flexuosa as follows: X. longipedicellata—unarmed, petioles 1–2 cm long, fruiting pedicels 12–15 mm long, articulate 3–7 mm from base; X. flexuosa—often with trunk or branch thorns, petioles 0.5 cm or less, fruiting pedicels 2.5–7 mm long, articulate at base.

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Literature Cited

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